

Add the following abstract:

**ABSTRACT**

A linear amplifier has an input terminal and an analogue switch. A switch input is connected to the input terminal, and a switch output is connected to the switch input to provide negative feedback. The switch output may be connected to an output terminal. The switch may also be connected to a supply voltage. Preferably, the switch input is connected to the input terminal via a first resistance, and the switch output is connected to the input terminal via a second resistance, so that a closed loop gain of the amplifier may be determined from the ratio of the second and first resistances.